



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

June 10, 2009

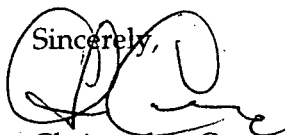
Jayne Allen  
Portland General Electric  
121 SW Salmon Street  
3WTCBR05  
Portland, Oregon 97204

Re: EPA Comments on May 18, 2009 Force Lake Fish Survey Results Memorandum  
Harbor Oil Site

Dear Ms. Allen:

The U.S. Environmental Protection Agency has reviewed the above document. Enclosed are comments on the document for the Voluntary Group to address in the final memorandum. Overall the study complied with the procedures outlined in the April 1, 2009 Fish Population Survey Sampling Design Memorandum for Force Lake. The most significant comment is to remove discussion on the implications of the study results on the Human Health Risk Assessment from the Fish Survey Results Memorandum. EPA believes that discussion would be more appropriately addressed in the upcoming Human Health Risk Assessment. If you have any questions, please contact me at (206) 553-1478, or via email.

Sincerely,



Christopher Cora,  
Project Manager

cc: Brian Cunningham, Confederated Tribes of Warm Springs  
Tom Downey, Confederated Tribes of Siletz Indians  
David Farrer, ODPH  
Mike Karnosh, Confederated Tribes of the Grand Ronde  
Mavis Kent, ODEQ  
Rose Longoria, Confederated Tribes and Bands of the Yakama Nation  
Erin Madden, Nez Perce Tribe  
Rob Neeley, NOAA  
Mark Stephan, HOCAG  
Mike Szumski, USFWS

USEPA SF



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**EPA COMMENTS ON MAY 18, 2009 FORCE LAKE FISH SURVEY  
MEMORANDUM, HARBOR OIL NPL SITE**

**GENERAL COMMENT:**

1. The memorandum should focus on how the survey was conducted and the results of the survey. Information regarding the implications of the survey on the Human Health Risk Assessment should be removed and included in the upcoming Baseline Human Health Risk Assessment. The Survey Memorandum may discuss the results in relation to implications of Force Lake's capacity to support a fishery resource.
2. There have been numerous anecdotal references to past fish kills that resulted in "large" carp dying, this should be addressed in the Remedial Investigation. The Survey Report should address the contrast between the 2009 survey results and reports of larger fish being seen and caught in the lake.
3. According to the ODFW 2009 sport fishing regulations, a number of warm water fish species found in Oregon lakes, including Force Lake, do not have size or take limits associated with them. Additionally, it should not be assumed that people will release every fish they catch based on size, especially when there is no size limit imposed on these species in Force Lake. It should also not be assumed that only "recreational anglers" are fishing the lake. Given the proximity of Force Lake to urban areas, immigrants, low income, and/or non-English speaking peoples are more than likely fishing the lake and generally keep their catch as a supplemental food source, regardless of size. Again, this information should be addressed in the RI Report.

**SPECIFIC COMMENTS:**

1. Page 1, Paragraph 3: The memorandum states that 88% of the captured fish were smaller than the size preferred by recreational anglers for consumption. The memorandum makes the assumption that the preferred size of fish for consumption is greater than 20 cm (8 in). It is unclear if this size preference is representative of the ethnically diverse population of North Portland that may eat fish caught in Force Lake. EPA prefers this memorandum to present the results of the survey (see General Comment). Consumption behavior(s) should be addressed in the Human Health Risk Assessment and uncertainty analysis in the Remedial Investigation (RI). A range of exposure assumptions should be addressed in the RI.
2. Page 2, Paragraph 1, Line 4. This sentence states that fishing access is limited. The aerial photograph indicates relatively good access along Force Avenue, with several parking areas immediately adjacent to the lake. Please elaborate upon the "limited access", such as only one side of the Lake is accessible for public fishing from the shore.
3. Page 5, Paragraph 1. It is unclear why use of a boat-mounted electroshocker was unable to collect the larger carp as this method should have been adequate to facilitate capture. Additional discussion on the failure to collect the larger carp should be provided.

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4. Page 5, Paragraph 1. Additional detail should be provided to explain the reasons that the biologist believed that the large carp observed 8 times were only one or two individual fish.

5. Page 5, Paragraph 2. Is there an estimated size of the fish captured by the osprey? Please include if an estimate is possible.

6. Page 5, Paragraph 2. The description of the osprey occurring in the area and the observation of one taking a fish from lake, gives the impression that the lake could be a substantial prey source for these osprey. However, the results of the 2009 survey suggest otherwise.

7. Tables 2 and 3. Bullhead appeared to make up a substantial portion of the Fishman catch, but were either not effectively sampled using the methods employed in 2009 or not present during the survey. This suggests that this species could have been under sampled in 2009. Please provide some discussion regarding the reduction of bullhead numbers in the survey.